REMARKS

Claims 1-30 are presently pending in the application. Claims 15, 20-23 and 25 have been withdrawn from consideration pursuant to an election of species requirement that has been made FINAL. Applicants request that these withdrawn claims when the elected species are found allowable. Examined claims 1-14, 16-19, 24, and 26-30 stand variously rejected under 35 U.S.C. §§ 102/103.

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Claim 1 has been amended herein to make explicit that the putative gene sequence has not previously been identified as a gene. Support for this amendment can be found throughout the specification as filed, for example on page 67, lines 26 to 30. It should be noted that the putative gene sequence can be in the cell's (e.g., plant cell, animal cell, etc.) own genome or in the genome of another organism (e.g., a microbe or virus) that has been integrated or is extrachromosomal to the cell's genome. No new matter has been entered as a result of these amendments and reconsideration of the claims is requested.

Rejections Under 35 U.S.C. § 102(b)

Claims 1, 2, 4-12, 18, 19 and 24 remain rejected as allegedly anticipated under 35 U.S.C. § 102(b) by Liu et al. (1997) PNAS (hereinafter "Liu").

The claims have been amended as shown above to make it explicit that the putative gene sequence is not an identified gene sequence. In contrast, Liu uses a reporter gene construct (luciferase) that has clearly been identified as a gene. Thus, since Liu does not describe or demonstrate each and every step of the claimed methods, this reference cannot anticipate the pending claims and Applicants respectfully request that this rejection be withdrawn.

Rejections Under 35 U.S.C. § 103

Claims 1, 3, 13, 14, 16, 17, and 26-30 stand rejected under 35 U.S.C. § 103(a) as allegedly obvious over Liu and a secondary reference. Specifically, claims 1 and 3 stand rejected as allegedly obvious over Liu in view of Heix. (Office Action, paragraph 9). Claims 1, 13, 14, 16, 17 and 26 stand rejected as allegedly obvious over Liu in view of Braselmann. (Office Action, paragraph 10). Claims 1, 26 and 27 stand rejected as allegedly obvious over Liu in view of Hagmann. (Office Action, paragraph 11). Claims 1 and 28 stand rejected as allegedly obvious over Liu in view of Burge. (Office Action, paragraph 12). Claims 1 and 29 stand rejected as allegedly obvious over Liu in view of Bailey. (Office Action, paragraph 13). Claims 1 and 30 stand rejected as allegedly obvious over Liu in view of Gelfand. (Office Action, paragraph 14).

Liu is cited as above and the secondary references are cited for teaching regulation of rRNA (Heix); an estrogen-related recombinant transcription factor fused to an estrogen regulated

activation domain (Braselmann); assays for activation of HSV using VP16 (Hagmann); an algorithm for the prediction of genes in genomic sequences (Burge); expressed sequence tag analysis methods (Bailey); and analysis of cDNA sequences for corresponding genomic sequences (Gelfand).

For the reasons noted above, Liu fails to describe or suggest methods in which putative gene sequences that have not been identified as gene sequences are obtained and then identified as gene or non-gene. As acknowledged by the Office, Liu relates entirely to modulation of expression of a known reporter gene, where modulation itself is the end goal. Moreover, Liu does not disclose modulation of a genomic sequence, as claimed. Furthermore, there is no motivation to combine Liu with any of the secondary references and certainly no combination of Liu and any of the secondary references that would reasonably lead one of skill in the art to the claimed methods. Heix, Braselmann and Hagmann are completely silent as to how one would go about identifying whether any given genomic sequence is in a gene. For their parts, there is absolutely no suggestion or motivation in Burge, Bailey or Gelfand to use an exogenous molecule in combination with gene prediction algorithms or methods to identify genes. Simply put, there is no combination of Liu and any of the secondary references that renders the pending claims obvious. Accordingly, Applicants respectfully request that the rejections be withdrawn.

CONCLUSION

Applicants believe that the claimed subject matter is now in condition for allowance and early notification to that effect is respectfully requested. If any issues remain to be addressed, the Examiner is encouraged to telephone the undersigned.

Respectfully submitted,

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